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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,572	07/20/2000	Alexander Ferguson	29699.010300	3887

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MCLEAN, VA 22102

EXAMINER
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NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/620,572

**Applicant(s)**

FERGUSON, ALEXANDER

**Examiner**

Andrew L Nalven

**Art Unit**

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2004 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/16/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-37 are pending.
2. The amendment submitted 11 August 2004 has been received and entered.

### ***Response to Arguments***

3. Applicant's arguments filed 11 August 2004 have been fully considered but they are not persuasive.
4. Applicant has argued on page 9 that the Glaser reference (US Patent No. 5,793,980) fails to teach "each time a song or act is completed, closing said portable file." Examiner respectfully disagrees. Glaser teaches the recording of live content or previously recorded content and subsequently digitizing the content (Glaser, column 6 lines 10-12). The content is then stored in a disk storage unit or archive (Glaser, column 6 lines 18-28). The recorded content being stored is evidence that the song or act is completed and the saving of a file to a storage device or archive is evidence of closing a portable file. When a file is created and saved to a storage device the file is inherently closed upon completion of the save operation.
5. Applicant has argued page 10 that Glaser does not "record a live performance and individually transmit portable files for each song or act." Examiner respectfully disagrees. Glaser teaches the recording of a live performance (Glaser, column 6 lines 10-12, live audio data) and transmits individual portable files (Glaser, column 6 lines 22-27, audio clips).

Art Unit: 2134

6. Applicant has argued on page 11 that the combination of Glaser and Mouri does not anticipate all of the limitations of claim 18. Specifically, Applicant has argued that Glaser and Mouri do not teach "a processing unit for converting said combined signals to a plurality of time-synchronized and locked digital signals and a plurality of digital signal processors for each of said plurality of time synchronized and locked digital signals for directing said signals." Examiner respectfully disagrees. The amendment of the limitations to include "time-synchronized and locked" does not differentiate claim 18 of the cited prior art. These added features are inherent in the system of Mouri. Signals that are combined together must be time-synchronized or else the resultant output would be unusable in a system such as Mouri's DVD recording system. Further, the outputted signals are recorded onto a recording medium and are thus locked and prevented from being modified.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1-2, 9-10, 28 are rejected under 35 U.S.C. 102(a) as being anticipated by Glaser et al US Patent No 5,793,980. Glaser teaches an audio on demand communication system.

Art Unit: 2134

9. With regards to claims 1 and 9, Glaser teaches the capturing of a live performance (Glaser, column 5 lines 40-44), the converting of the signals to a digital format (Glaser, column 5 lines 47-52), the encoding of the digitally formatted signals into a portable file (Glaser, column 6 lines 15-22), and the transporting of the portable file over a network (Glaser, column 6 lines 32-34, Figure 1 and 2A).
10. With regards to claims 2 and 10, Glaser teaches the receiving of the portable file (Glaser, column 25 lines 17-21), the publishing of the file for use by an end user (column 25 lines 30-36), and the transporting of the file to an end user (column 25 lines 37-56 and 19-29).
11. With regards to claim 28, Examiner takes official notice that the publishing of audio portable files is well known in the art and it would have been obvious to one of ordinary skill in the art to publish portable files on a CD because it offers the advantage of providing a high capacity storage medium that is easily distributable.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2134

13. Claims 3, 5-6, 11, 13-15, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al US Patent No 5,793,980 in view of Tewfik et al US Patent No 6,442,283.

14. With regards to claims 3, 5-6, 11, and 13-15, Glaser, as described above, fails to teach the inserting of a digital watermark through an subtle or invisible method. Tewfik discloses the inserting of a digital watermark into multimedia data (Tewfik, column 2 lines 50-53) through an invisible method (Tewfik, column 3 lines 10-29) and a subtle method (Tewfik, column 7 lines 1-15). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Tewfik's method of inserting a watermark into a music file with either the invisible or subtle watermarking techniques because they offer the advantage of allowing data to be embedded into media that would help an owner prove ownership of the data in the event that it is illegally distributed (Tewfik, column 1 lines 9-33).

15. With regards to claims 29 and 34, Glaser as modified teaches a digital watermark comprising two or more levels of verification (Glaser, column 5 lines 40-47, x1, x2).

16. With regards to claims 30 and 35, Glaser as modified teaches one of said levels of verification comprising a repeating code sequence that is encoded in said digitally formatted signals (Glaser, column 5 lines 16-18 and lines 40-45).

17. With regards to claims 31 and 36, Glaser as modified teaches one of the levels of verification comprising a digital signature for said portable file as a whole (Glaser, column 5 lines 40-50, x2 using for hash function).

Art Unit: 2134

18. With regards to claims 32 and 37, Glaser as modified teaches the digital watermark not degrading the playback of the portable music file (Glaser, column 2 lines 42-44, imperceptible).

19. With regards to claim 33, Examiner takes official notice that the publishing of audio portable files is well known in the art and it would have been obvious to one of ordinary skill in the art to publish portable files on a CD because it offers the advantage of providing a high capacity storage medium that is easily distributable.

20. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al US Patent No 5,793,980 and Tewfik et al US Patent No 6,442,283 as applied to claim 3 above, and further in view of Leighton US Patent No 5,664,018.

21. With regards to claims 4 and 12, Glaser as modified fails to teach the insertion of a digital watermark using the brute force method. Leighton teaches the insertion of a watermark using the brute force method (Leighton, column 3 lines 6-9, column 4 lines 38-41, column 5 lines 16-17). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Leighton's brute force method of inserting a watermark because it offers the advantage of providing the benefits of identification of a watermark and also inhibiting an attack on the watermark by averaging two copies of a particular document (Leighton, column 1 lines 128-28 and 52-64).

Art Unit: 2134

22. Claims 7-8 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al US Patent No 5,793,980 in view of Cook et al US Patent No 6,338,044.

23. With regards to claims 7-8 and 16-17, Glaser, as described above, fails to teach the portable file being of an MP3 or WAV type. Cook teaches a personal digital content system in which the portable files are of the type WAV and MP3 (Cook, column 3 lines 18-22). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Cook's suggested file encoding types because it offers the user a choice of a higher sound quality WAV file or the more compressed MP3 file that is more quickly downloaded over the Internet (Cook, column 1 lines 20-32).

24. Claims 18-19 and 25, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al US Patent No 5,793,980 in view of Mouri US Patent No 6,052,470.

25. With regards to claim 18, Glaser teaches a capture device which receives a plurality of analog signal and converts the signals to digital signals (Glaser, column 5 lines 40-55, Figure 2A), a processing unit for converting the combined signal to a digital signal (Glaser, column 5 lines 47-52), and a digital signal processor for a digital signal for converting a signal to a portable file (Glaser, column 6 lines 15-22). Glaser fails to specifically teach the use of a multiplexer for combining digital signals or the inclusion of a processing unit for converting the combined signal into a plurality of digital signals. Mouri teaches a system for processing audio surround sound including a multiplexer for



Art Unit: 2134

combining digital signals into a combined signal (Mouri, column 19 lines 40-45) and a processing unit for converting the combined signal to a plurality of time-synchronized and locked digital signals (Mouri, column 19 lines 40-45 and 66-67). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include Mouri's multiplexer and processing unit because they offer the advantage of allowing multiple audio signals to be used for a recording allowing the use of surround sound (Mouri, column 2 lines 54-55, column 3 lines 50-61).

26. With regards to claim 19, Glaser as modified teaches the multiplexer separated from the processing unit (Mouri, Figure 18).

27. With regards to claim 25, Glaser teaches storing a combined signal (Glaser, column 6 lines 17-23, storing content). Glaser fails to teach the combining of signals. Mouri teaches the converting of the digitally formatted signals into a combined signal (Mouri, column 19 lines 40-45), converting the combined signal to a plurality of digital signals (Mouri, column 19 lines 66-67), and storing said plurality of digital signals into said portable file (Mouri, column 19 lines 45-56, modulation resultant signal to recording medium). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include Mouri's multiplexer and processing unit because they offer the advantage of allowing multiple audio signals to be used for a recording allowing the use of surround sound (Mouri, column 2 lines 54-55, column 3 lines 50-61).

28. With regards to claim 27, Glaser as modified teaches the plurality of digital signals can be extracted from the portable file (Mouri, column 19 lines 56-65, multiplexing resultant signal).

29. Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glaser et al US Patent No 5,793,980 and Mouri US Patent No 6,052,470, as applied to claim 18 above, and in further view of Tewfik et al US Patent No 6,442,283.

30. With regards to claim 20, Glaser as modified fails to teach the digital watermark being inserted into the portable file. Tewfik teaches the digital watermark being inserted into the portable file (Tewfik, column 2 lines 50-53, column 3 lines 10-29, column 7 lines 1-15). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Tewfik's method of inserting a watermark into a music file with either the invisible or subtle watermarking techniques because they offer the advantage of allowing data to be embedded into media that would help an owner prove ownership of the data in the event that it is illegally distributed (Tewfik, column 1 lines 9-33).

31. With regards to claim 21, Glaser as modified teaches a digital watermark comprising two or more levels of verification (Glaser, column 5 lines 40-47, x1, x2).

32. With regards to claim 22, Glaser as modified teaches one of said levels of verification comprising a repeating code sequence that is encoded in said digitally formatted signals (Glaser, column 5 lines 16-18 and lines 40-45).

33. With regards to claim 23, Glaser as modified teaches one of the levels of verification comprising a digital signature for said portable file as a whole (Glaser, column 5 lines 40-50, x2 using for hash function).

Art Unit: 2134

34. With regards to claim 24, Glaser as modified teaches the digital watermark not degrading the playback of the portable music file (Glaser, column 2 lines 42-44, imperceptible).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L Nalven whose telephone number is 571 272

Art Unit: 2134


3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven

AN

  
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